

1

2

3 CLAIMS:

4

5 1. (Original) An energy conditioner comprising:  
6 an internally floating shield structure;  
7 a first electrode structure;  
8 a second electrode structure;  
9 wherein said first electrode structure comprises at least one first electrode structure  
10 first conductive layer, said second electrode structure comprises at least one second electrode  
11 structure first conductive layer;  
12 wherein said internally floating shield structure shields said first electrode structure  
13 first conductive layer from said second electrode structure, and said internally floating shield  
14 structure shields said second electrode structure first conductive layer from said first electrode  
15 structure; and  
16 said first electrode structure includes a first electrode contact region.

17

18 2. (Original) A filter arrangement comprising the energy conditioner of claim 1 and  
19 a conductive line segment of a circuit, wherein said first electrode structure contact region is  
20 electrically connected to said conductive line segment.

21

22 3. (Original) A capacitively/inductively coupling energy conditioner, comprising:  
23 an internally floating shield structure;  
24 a first electrode structure;  
25 a second electrode structure;  
26 wherein said first electrode structure comprises at least one first electrode structure  
27 first conductive layer, said second electrode structure comprises at least one second electrode  
28 structure first conductive layer;  
29 wherein said internally floating shield structure shields said first electrode structure  
30 first conductive layer from said second electrode structure, and said internally floating shield

1 structure shields said second electrode structure first conductive layer from said first electrode  
2 structure; and

3           said first electrode structure includes a first electrode capacitive/inductive coupling  
4 pad.

5

6 4. (Original) A filter arrangement comprising the capacitively/inductively coupling  
7 energy conditioner of claim 3 and a conductive line segment of a circuit, wherein first  
8 electrode capacitive/inductive coupling pad is capacitively/inductively coupled to said  
9 conductive line segment.

10

11 5. (Original) An internally shielded capacitor comprising;

12           a shielding conductive layer;

13           a first electrode defining at least a first electrode layer, wherein said first electrode  
14 layer is above said shielding conductive layer;

15           a second electrode defining at least a second electrode layer, wherein said second  
16 electrode layer is below said shielding conductive layer;

17           wherein said shielding, said first electrode, and said second electrode are electrically  
18 isolated from one another; and

19           wherein said first electrode, said second electrode, and said shielding conductive layer  
20 are positioned and sized relative to one another such that any straight line passing through  
21 said first electrode and said second electrode contacts said shielding conductive layer.

22

23 6. (Original) An energy conditioner comprising;

24           a shielding defining at least (1) upper shielding conductive layer, (2) a center shielding  
25 conductive layer, and (3) a lower shielding conductive layer, wherein said upper shielding  
26 conductive layer is above said center shielding conductive layer and said center shielding  
27 conductive layer is above said lower shielding conductive layer;

28           a first electrode defining at least a first electrode layer, wherein said first electrode  
29 layer is below said upper shielding conductive layer and above said center shielding  
30 conductive layer;

1           a second electrode defining at least a second electrode layer, wherein said second  
2 electrode layer is below said center shielding conductive layer and above said lower shielding  
3 conductive layer; and

4           wherein said shielding, said first electrode, and said second electrode are electrically  
5 isolated from one another; and

6           wherein said first electrode, said second electrode, and said center shielding  
7 conductive layer are positioned and sized relative to one another such that any straight line  
8 passing through said first electrode and said second electrode contacts said center shielding  
9 conductive layer.

10

11       7. (Original) The conditioner of claim 6, wherein said shielding further comprises at  
12 least one conductive aperture operable for conductively coupling together all of said shielding  
13 conductive layers to one another.

14

15       8. (Original) The conditioner of claim 6, wherein said shielding further comprises at  
16 least one conductive via structure operable for conductively coupling together all of said  
17 shielding conductive layers to one another.

18

19       9. (Original) The conditioner of claim 6, wherein said shielding further comprises at  
20 least one conductive aperture, wherein said at least one conductive aperture passes through at  
21 least said first electrode layer or said second electrode layer; and

22           wherein said at least one conductive aperture is operable for conductively coupling  
23 together all of said shielding conductive layers to one another.

24

25       10. (Original) The conditioner of claim 6, wherein said shielding further comprises at  
26 least one conductive via structure, wherein said at least one conductive via structure passes  
27 through at least said first electrode layer or said second electrode layer; and

28           wherein said at least one conductive via structure is operable for conductively  
29 coupling together all of said shielding conductive layers to one another.

30

1 11. (Original) The energy conditioner of claim 7, wherein said shielding is not  
2 operable to be physically coupled to a circuit path.

3

4 12. (Original) The energy conditioner of claim 8, wherein said shielding is not  
5 operable to be physically coupled to a circuit path.

6

7 13. (Original) A method of making an energy conditioner comprising:  
8 providing an internally floating shield structure;  
9 providing a first electrode structure;  
10 providing a second electrode structure;  
11 wherein said first electrode structure comprises at least one first electrode structure  
12 first conductive layer, said second electrode structure comprises at least one second electrode  
13 structure first conductive layer;  
14 wherein said internally floating shield structure shields said first electrode structure  
15 first conductive layer from said second electrode structure, and said internally floating shield  
16 structure shields said second electrode structure first conductive layer from said first electrode  
17 structure; and  
18 said first electrode structure includes a first electrode contact region.

19

20 14. (Original) A method of making filter arrangement comprising (1) an energy  
21 conditioner comprising an internally floating shield structure; a first electrode structure; a  
22 second electrode structure; wherein said first electrode structure comprises at least one first  
23 electrode structure first conductive layer, said second electrode structure comprises at least  
24 one second electrode structure first conductive layer; wherein said internally floating shield  
25 structure shields said first electrode structure first conductive layer from said second electrode  
26 structure, and said internally floating shield structure shields said second electrode structure  
27 first conductive layer from said first electrode structure; wherein said first electrode structure  
28 includes a first electrode contact region and (2) a conductive line segment of a circuit,  
29 wherein said first electrode structure contact region is electrically connected to said  
30 conductive line segment, comprising the steps of:

1           providing said energy conditioner;  
2           providing said conductive line segment; and  
3           electrically connecting said conductive line segment to said energy conditioner.

4

5       15. (Original)   A method of making a capacitively/inductively coupling energy  
6       conditioner, comprising:

7           providing an internally floating shield structure;  
8           providing a first electrode structure;  
9           providing a second electrode structure;  
10          wherein said first electrode structure comprises at least one first electrode structure  
11       first conductive layer, said second electrode structure comprises at least one second electrode  
12       structure first conductive layer;

13          wherein said internally floating shield structure shields said first electrode structure  
14       first conductive layer from said second electrode structure, and said internally floating shield  
15       structure shields said second electrode structure first conductive layer from said first electrode  
16       structure; and

17          said first electrode structure includes a first electrode capacitive/inductive coupling  
18       pad.

19

20       16. (Original)   The method of making a circuit including the method of claim 15, and  
21       further comprising capacitively/inductively coupling said energy conditioner to a conductive  
22       line segment.

23

24       17. (Original)   A method of making an internally shielded capacitor comprising;  
25           providing a shielding conductive layer;  
26           providing a first electrode defining at least a first electrode layer, wherein said first  
27       electrode layer is above said shielding conductive layer;  
28           providing a second electrode defining at least a second electrode layer, wherein said  
29       second electrode layer is below said shielding conductive layer;  
30           wherein said shielding, said first electrode, and said second electrode are electrically

1      isolated from one another; and

2                wherein said first electrode, said second electrode, and said shielding conductive layer  
3      are positioned and sized relative to one another such that any straight line passing through  
4      said first electrode and said second electrode contacts said shielding conductive layer.

5

6      18. (Original)    A method of making an energy conditioner comprising;

7                providing a shielding defining at least (1) upper shielding conductive layer, (2) a  
8      center shielding conductive layer, and (3) a lower shielding conductive layer, wherein said  
9      upper shielding conductive layer is above said center shielding conductive layer and said  
10     center shielding conductive layer is above said lower shielding conductive layer;

11                providing a first electrode defining at least a first electrode layer, wherein said first  
12     electrode layer is below said upper shielding conductive layer and above said center shielding  
13     conductive layer;

14                providing a second electrode defining at least a second electrode layer, wherein said  
15     second electrode layer is below said center shielding conductive layer and above said lower  
16     shielding conductive layer; and

17                wherein said shielding, said first electrode, and said second electrode are electrically  
18     isolated from one another; and

19                wherein said first electrode, said second electrode, and said center shielding  
20     conductive layer are positioned and sized relative to one another such that any straight line  
21     passing through said first electrode and said second electrode contacts said center shielding  
22     conductive layer.

23

24      19. (Original)    The method of claim 18, wherein said shielding further comprises at  
25     least one conductive aperture operable for conductively coupling together all of said shielding  
26     conductive layers to one another.

27

28      20. (Original)    The method of claim 18, wherein said shielding further comprises at  
29     least one conductive via structure operable for conductively coupling together all of said  
30     shielding conductive layers to one another.

1        21. (Original)     The method claim 18, wherein said shielding further comprises at least  
2        one conductive aperture, wherein said at least one conductive aperture passes through at least  
3        said first electrode layer or said second electrode layer; and

4                wherein said at least one conductive aperture is operable for conductively coupling  
5        together all of said shielding conductive layers to one another.

6

7        22. (Original)     The method of claim 18, wherein said shielding further comprises at  
8        least one conductive via structure, wherein said at least one conductive via structure passes  
9        through at least said first electrode layer or said second electrode layer; and

10                wherein said at least one conductive via structure is operable for conductively  
11        coupling together all of said shielding conductive layers to one another.

12

13        23. (Original)     The method of claim 19, wherein said shielding is designed to be  
14        physically isolated from a circuit path.

15

16        24. (Original)     The energy conditioner of claim 20, wherein said shielding is designed  
17        be physically isolated from a circuit path.

18

19        25. (Original)     A method of using an energy conditioner, said energy conditioner  
20        comprising:

21                an internally floating shield structure; a first electrode structure; a second electrode  
22        structure; wherein said first electrode structure comprises at least one first electrode structure  
23        first conductive layer, said second electrode structure comprises at least one second electrode  
24        structure first conductive layer; wherein said internally floating shield structure shields said  
25        first electrode structure first conductive layer from said second electrode structure, and said  
26        internally floating shield structure shields said second electrode structure first conductive  
27        layer from said first electrode structure; and said first electrode structure includes a first  
28        electrode contact region, said method comprising:

29                connecting said energy conditioner in an electrical circuit.

30

1        26. (Original) A method of using a capacitively/inductively coupling energy  
2        conditioner, said energy conditioner comprising: an internally floating shield structure; a first  
3        electrode structure; a second electrode structure; wherein said first electrode structure  
4        comprises at least one first electrode structure first conductive layer, said second electrode  
5        structure comprises at least one second electrode structure first conductive layer; wherein said  
6        internally floating shield structure shields said first electrode structure first conductive layer  
7        from said second electrode structure, and said internally floating shield structure shields said  
8        second electrode structure first conductive layer from said first electrode structure; and said  
9        first electrode structure includes a first electrode capacitive/inductive coupling pad, said  
10      method comprising:

11                  connecting said energy conditioner in an electrical circuit.

12

13        27. (Original) A method of using an internally shielded capacitor, said internally  
14        shielded capacitor comprising: a shielding conductive layer; a first electrode defining at least  
15        a first electrode layer, wherein said first electrode layer is above said shielding conductive  
16        layer; a second electrode defining at least a second electrode layer, wherein said second  
17        electrode layer is below said shielding conductive layer; wherein said shielding, said first  
18        electrode, and said second electrode are electrically isolated from one another; and wherein  
19        said first electrode, said second electrode, and said shielding conductive layer are positioned  
20        and sized relative to one another such that any straight line passing through said first  
21        electrode and said second electrode contacts said shielding conductive layer, said method  
22        comprising:

23                  connecting said internally shielded capacitor in an electrical circuit.

24

25        28. (Original) A method of using an energy conditioner, said energy conditioner  
26        comprising: a shielding defining at least (1) upper shielding conductive layer, (2) a center  
27        shielding conductive layer, and (3) a lower shielding conductive layer, wherein said upper  
28        shielding conductive layer is above said center shielding conductive layer and said center  
29        shielding conductive layer is above said lower shielding conductive layer; a first electrode  
30        defining at least a first electrode layer, wherein said first electrode layer is below said upper

1       shielding conductive layer and above said center shielding conductive layer; a second  
2       electrode defining at least a second electrode layer, wherein said second electrode layer is  
3       below said center shielding conductive layer and above said lower shielding conductive layer;  
4       and wherein said shielding, said first electrode, and said second electrode are electrically  
5       isolated from one another; and wherein said first electrode, said second electrode, and said  
6       center shielding conductive layer are positioned and sized relative to one another such that  
7       any straight line passing through said first electrode and said second electrode contacts said  
8       center shielding conductive layer, said method comprising:  
9                  connecting said energy conditioner in an electrical circuit.

10  
11      29. (Original) The method of claim 28, wherein said shielding further comprises at  
12       least one conductive aperture operable for conductively coupling together all of said shielding  
13       conductive layers to one another.

14  
15      30. (Original) The method of claim 28, wherein said shielding further comprises at  
16       least one conductive via structure operable for conductively coupling together all of said  
17       shielding conductive layers to one another.

18  
19      31. (Original) The method of claim 28, wherein said shielding further comprises at  
20       least one conductive aperture, wherein said at least one conductive aperture passes through at  
21       least said first electrode layer or said second electrode layer; and  
22                  wherein said at least one conductive aperture is operable for conductively coupling  
23       together all of said shielding conductive layers to one another.

24  
25      32. (Original) The method of claim 28, wherein said shielding further comprises at  
26       least one conductive via structure, wherein said at least one conductive via structure passes  
27       through at least said first electrode layer or said second electrode layer; and  
28                  wherein said at least one conductive via structure is operable for conductively  
29       coupling together all of said shielding conductive layers to one another.

30

1    33. (Original) The method of claim 29, wherein said shielding is designed to be  
2    physically isolated from a circuit path.

3

4    34. (Original) The method of claim 30, wherein said shielding is designed to be  
5    physically isolated from a circuit path.

6